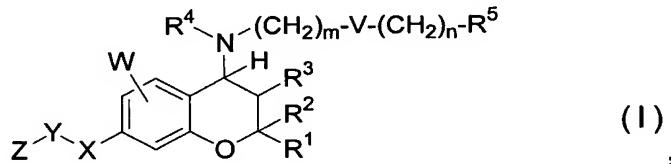


Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A benzopyran compound of formula (I)



or a pharmaceutically acceptable salt thereof,

wherein

X is NR⁶ wherein R⁶ is hydrogen atom or C₁₋₄ alkyl group;

Y is a bond, SO or SO₂;

Z is C₁₋₄ alkyl group (wherein the C₁₋₄ alkyl group may be arbitrarily substituted with 1 to 5 halogen atoms ~~or phenyl group (wherein the phenyl group may be arbitrarily substituted with C₁₋₄ alkyl group)) or phenyl group (wherein the phenyl group may be arbitrarily substituted with C₁₋₄ alkyl group);~~

W is hydrogen atom, hydroxy group, C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom), halogen atom, C₁₋₄ alkyl group or C₁₋₆ alkylsulfonylamino group;

R¹ and R² are independently of each other C₁₋₃ alkyl group (wherein the C₁₋₃ alkyl group may be arbitrarily substituted with hydroxy group, methoxy group, halogen atom or trifluoromethoxy group);

R³ is hydrogen atom, hydroxy group or methoxy group;

m is an integer of 0 to 4;

n is an integer of 0 to 4;

V is a single bond, CR⁷R⁸ wherein R⁷ is

- C₁₋₆ alkyl group (wherein the C₁₋₆ alkyl group may be arbitrarily substituted with halogen atom, hydroxy group, C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom), C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group (wherein each of the C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group may be arbitrarily substituted with 1 to 3 R¹⁰ wherein R¹⁰ is halogen atom; hydroxy group; C₁₋₆ alkyl group (wherein the C₁₋₆ alkyl group may be arbitrarily substituted with halogen atom, hydroxy group or C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom)); C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom); nitro group; cyano group; formyl group; formamide group; sulfonylamino group; sulfonyl group; amino group; C₁₋₆ alkylamino group; di-C₁₋₆ alkylamino group; C₁₋₆ alkylcarbonylamino group; C₁₋₆ alkylsulfonylamino group; aminocarbonyl group; C₁₋₆ alkylaminocarbonyl group; di-C₁₋₆ alkylaminocarbonyl group; C₁₋₆ alkylcarbonyl group; C₁₋₆ alkoxycarbonyl group; aminosulfonyl group; C₁₋₆ alkylsulfonyl group; carboxy group or C₆₋₁₄ arylcarbonyl group, and when a plurality of R¹⁰ are present, they may be identical or different from each other);

- C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group (wherein each of the C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group may be arbitrarily substituted with 1 to 3 R¹⁰ wherein R¹⁰ has the above-mentioned meaning);

- hydroxy group or

- C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom), and R⁸ is

- hydrogen atom,

- C₁₋₆ alkyl group (wherein the C₁₋₆ alkyl group may be arbitrarily substituted with halogen atom, hydroxy group, C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily

substituted with halogen atom)),

- C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group (wherein each of the C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group may be arbitrarily substituted with 1 to 3 R¹¹ wherein R¹¹ is halogen atom; hydroxy group; C₁₋₆ alkyl group (wherein the C₁₋₆ alkyl group may be arbitrarily substituted with halogen atom, hydroxy group or C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom)); C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom); nitro group; cyano group; formyl group; formamide group; sulfonylamino group; sulfonyl group; amino group; C₁₋₆ alkylamino group; di-C₁₋₆ alkylamino group; C₁₋₆ alkylcarbonylamino group; C₁₋₆ alkylsulfonylamino group; aminocarbonyl group; C₁₋₆ alkylaminocarbonyl group; di-C₁₋₆ alkylaminocarbonyl group; C₁₋₆ alkylcarbonyl group; C₁₋₆ alkoxy carbonyl group; aminosulfonyl group; C₁₋₆ alkylsulfonyl group; carboxy group or C₆₋₁₄ arylcarbonyl group, and when a plurality of R¹¹ are present, they may be identical or different from each other),

- hydroxy group or

- C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom), or R⁷ together with R⁸ may represent O or S, or V is NR⁹ wherein R⁹ is hydrogen or C₁₋₆ alkyl group (wherein the C₁₋₆ alkyl group may be arbitrarily substituted with halogen atom, C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom), hydroxy group, C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group (wherein each of the C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group may be arbitrarily substituted with 1 to 3 R¹¹ wherein R¹¹ has the above-mentioned meaning)); or O, S, SO or SO₂;

R⁴ is hydrogen or C₁₋₆ alkyl group (wherein the C₁₋₆ alkyl group may be arbitrarily substituted with halogen atom, C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom), or hydroxy group); and

R^5 is

- hydrogen atom,
- C_{1-6} alkyl group (wherein the C_{1-6} alkyl group may be arbitrarily substituted with halogen atom, C_{1-6} alkoxy group (wherein the C_{1-6} alkoxy group may be arbitrarily substituted with halogen atom), amino group, carboxy group or hydroxy group),
- C_{3-8} cycloalkyl group or C_{3-8} cycloalkenyl group (wherein the C_{3-8} cycloalkyl group or C_{3-8} cycloalkenyl group may be arbitrarily substituted with halogen atom, C_{1-6} alkyl group (wherein the C_{1-6} alkyl group may be arbitrarily substituted with halogen atom, C_{1-6} alkoxy group (wherein the C_{1-6} alkoxy group may be arbitrarily substituted with halogen atom),
amino group, carboxy group or hydroxy group), C_{1-6} alkoxy group (wherein the C_{1-6} alkoxy group may be arbitrarily substituted with halogen atom), amino, carboxy group or hydroxy group), or
- C_{6-14} aryl group or C_{2-9} heteroaryl group (wherein each of the C_{6-14} aryl group or C_{2-9} heteroaryl group may be arbitrarily substituted with 1 to 3 R^{12} wherein R^{12} is halogen atom; hydroxy group; C_{1-6} alkyl group (wherein the C_{1-6} alkyl group may be arbitrarily substituted with halogen atom, hydroxy group or C_{1-6} alkoxy group (wherein the C_{1-6} alkoxy group may be arbitrarily substituted with halogen atom)); C_{1-6} alkoxy group (wherein the C_{1-6} alkoxy group may be arbitrarily substituted with halogen atom); nitro group; cyano group; formyl group; formamide group; sulfonylamino group; sulfonyl group; amino group; C_{1-6} alkylamino group; di- C_{1-6} alkylamino group; C_{1-6} alkylcarbonylamino group; C_{1-6} alkylsulfonylamino group; aminocarbonyl group; C_{1-6} alkylaminocarbonyl group; di- C_{1-6} alkylaminocarbonyl group; C_{1-6} alkylcarbonyl group; C_{1-6} alkoxycarbonyl group; aminosulfonyl group; C_{1-6} alkylsulfonyl group; carboxy group, C_{6-14} arylcarbonyl group, ureido group, C_{1-6} alkylureilene group, C_{6-14} aryl C_{1-6} alkylamino group, C_{1-6} alkoxycarbonylamino group, C_{6-14} aryloxy group

or C₆₋₁₄ arylcarbonylamino group, when a plurality of R¹² are present, they may be identical or different from each other).

2. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 1, wherein both R¹ and R² are methyl group, R³ is hydroxy group, and V is a single bond.

3. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 1, wherein both R¹ and R² are methyl group, R³ is hydroxy group, and V is CR⁷R⁸.

4. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 1, wherein both R¹ and R² are methyl group, R³ is hydroxy group, and V is NR⁹.

5. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 2, wherein R⁵ is C₁₋₆ alkyl group, C₃₋₈ cycloalkyl group or C₆₋₁₄ aryl group.

6. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 3, wherein R⁵ is C₁₋₆ alkyl group, C₃₋₈ cycloalkyl group or C₆₋₁₄ aryl group.

7. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 4, wherein R⁵ is C₁₋₆ alkyl group, C₃₋₈ cycloalkyl group or C₆₋₁₄ aryl group.

8. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 5, wherein W is hydrogen atom, hydroxy group, methoxy group, chlorine atom, bromine atom, methyl group, ethyl group or methylsulfonylamino group.

9. (Previously Presented) The benzopyran compound or a pharmaceutically

acceptable salt thereof according to claim 6, wherein W is hydrogen atom, hydroxy group,

methoxy group, chlorine atom, bromine atom, methyl group, ethyl group or methylsulfonylamino group.

10. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 8, wherein R⁵ is C₁₋₆ alkyl group or C₆₋₁₄ aryl group, R⁶ is hydrogen atom or methyl group, Y is SO₂, and Z is C₁₋₄ alkyl group.

11. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 8, wherein R⁵ is C₁₋₆ alkyl group or C₆₋₁₄ aryl, R⁶ is hydrogen atom or methyl group, Y is a bond, and Z is C₁₋₄ alkyl group.

12. (Previously Presented) A benzopyran compound which is N-{(3R*, 4S*)-3-hydroxy-6-methoxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-1-benzopyran-7-yl}- methanesulfonamide or a pharmaceutically acceptable salt thereof.

13. (Previously Presented) A benzopyran compound which is N-{(3R*, 4S*)-3,6-dihydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-1-benzopyran-7-yl}- methanesulfonamide or a pharmaceutically acceptable salt thereof.

14. (Previously Presented) A benzopyran compound which is N-{(3R*, 4S*)-3-hydroxy-6-methoxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-1-benzopyran-7-yl}-N-methylmethanesulfonamide or a pharmaceutically acceptable salt thereof.

15. (Previously Presented) A benzopyran compound which is N-{(3R*, 4S*)-4-[(2-cyclohexylethyl)amino]-3-hydroxy-6-methoxy-2,2-dimethyl-3,4-dihydro-2H-1-benzopyran-7-yl}- methanesulfonamide or a pharmaceutically acceptable salt thereof.

16. (Previously Presented) A benzopyran compound which is N-{(3R*, 4S*)-3-hydroxy-6-methoxy-2,2-dimethyl-4-(pentylamino)-3,4-dihydro-2H-1-benzopyran-7-yl}- methanesulfonamide or a pharmaceutically acceptable salt thereof.

17. (Previously Presented) A benzopyran compound which N- $\{(3R^*, 4S^*)\}$ -3-hydroxy-2,2,8-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-1-benzopyran-7-yl} methanesulfonamide or a pharmaceutically acceptable salt thereof.

18. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)\}$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl} methanesulfonamide or a pharmaceutically acceptable salt thereof.

19. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)\}$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl} ethanesulfonamide or a pharmaceutically acceptable salt thereof.

20. (Previously Presented) A benzopyran compound which is 1,1,1-trifluoro-N- $\{(3R^*, 4S^*)\}$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}- methanesulfonamide or a pharmaceutically acceptable salt thereof.

21. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)\}$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}-N-methylmethanesulfonamide or a pharmaceutically acceptable salt thereof.

22. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)\}$ -6-bromo-3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}- methanesulfonamide or a pharmaceutically acceptable salt thereof.

23. (Previously Presented) A benzopyran compound which is (3R * , 4S *)-2,2-dimethyl-7-dimethylamino-4-[(2-phenylethyl)amino]-3-chromanol or a pharmaceutically acceptable salt thereof.

24. (Previously Presented) A benzopyran compound which is (3R * , 4S *)-2,2-dimethyl-7-methylamino-4-[(2-phenylethyl)amino]-3-chromanol or a pharmaceutically acceptable salt thereof.

25. (Previously Presented) A benzopyran compound which is $(3R^*, 4S^*)$ -4- $\{(2\text{-}(4\text{-fluorophenyl})\text{ethyl})\text{amino}\}$ -2,2-dimethyl-7-dimethylamino-3-chromanol or a pharmaceutically acceptable salt thereof.

26. (Previously Presented) A benzopyran compound which is $(3R^*, 4S^*)$ -6-methoxy-2,2-dimethyl-7-dimethylamino-4-[(2-phenylethyl)amino]-3-chromanol or a pharmaceutically acceptable salt thereof.

27. (Previously Presented) A benzopyran compound which is $(3R^*, 4S^*)$ -6-methoxy-2,2-dimethyl-7-methylamino-4-[(2-phenylethyl)amino]-3-chromanol or a pharmaceutically acceptable salt thereof.

28. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl $\}$ -4-methylbenzenesulfonamide or a pharmaceutically acceptable salt thereof.

29. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-6-[(methylsulfonyl)amino]-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl $\}$ -methanesulfonamide or a pharmaceutically acceptable salt thereof.

30. (Previously Presented) A benzopyran compound which is $(3R^*, 4S^*)$ -2,2-dimethyl-7-methylethylamino-4-[(2-phenylethyl)amino]-3-chromanol or a pharmaceutically acceptable salt thereof.

31. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-chromen-7-yl $\}$ -N-isopropylmethanesulfonamide or a pharmaceutically acceptable salt thereof.

32. (Previously Presented) A pharmaceutical comprising the benzopyran compound of claim 1 or pharmaceutically acceptable salt thereof as an active ingredient, and

a pharmaceutically acceptable excipient.

33. (Previously Presented) A pharmaceutical for treating arrhythmia comprising the benzopyran compound of claim 1 or pharmaceutically acceptable salt thereof as an active ingredient, and a pharmaceutically acceptable excipient.

34. (Previously Presented) The benzopyran compound of claim 18, wherein the pharmaceutically acceptable salt is N- $\{(3R^*, 4S^*)\text{-3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}\}$ methanesulfonamide maleate.

35. (Previously Presented) The benzopyran compound of claim 19, wherein the pharmaceutically acceptable salt is N- $\{(3R^*, 4S^*)\text{-3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}\}$ ethanesulfonamide hydrochloride.

36. (Previously Presented) The benzopyran compound of claim 20, wherein the pharmaceutically acceptable salt is 1,1,1-trifluoro-N- $\{(3R^*, 4S^*)\text{-3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}\}$ -methanesulfonamide maleate.

37. (Previously Presented) The benzopyran compound of claim 21, wherein the pharmaceutically acceptable salt is N- $\{(3R^*, 4S^*)\text{-3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}\}$ -N-methylmethanesulfonamide hydrochloride.

38. (Previously Presented) The benzopyran compound of claim 23, wherein the pharmaceutically acceptable salt is (3R * , 4S *)-2,2-dimethyl-7-dimethylamino-4-[(2-phenylethyl)amino]-3-chromanol hydrochloride.

39. (Previously Presented) The benzopyran compound of claim 24, wherein the pharmaceutically acceptable salt is (3R * , 4S *)-2,2-dimethyl-7-methylamino-4-[(2-phenylethyl)amino]-3-chromanol hydrochloride.

40. (Previously Presented) The benzopyran compound of claim 25, wherein the pharmaceutically acceptable salt is $(3R^*, 4S^*)$ -4-{[2-(4-fluorophenyl)ethyl]amino}-2,2-dimethyl-7-dimethylamino-3-chromanol hydrochloride.

41. (Previously Presented) The benzopyran compound of claim 27, wherein the pharmaceutically acceptable salt is $(3R^*, 4S^*)$ -6-methoxy-2,2-dimethyl-7-methylamino-4-[(2-phenylethyl)amino]-3-chromanol hydrochloride.

42. (Previously Presented) The benzopyran compound of claim 30, wherein the pharmaceutically acceptable salt is $(3R^*, 4S^*)$ -2,2-dimethyl-7-methylethylamino-4-[(2-phenylethyl)amino]-3-chromanol hydrochloride.

43. (Previously Presented) The benzopyran compound of claim 31, wherein the pharmaceutically acceptable salt is $(N\text{-}\{(3R^*, 4S^*)\text{-}3\text{-}hydroxy\text{-}2,2\text{-}dimethyl\text{-}4\text{-}\[(2\text{-}phenylethyl)amino\]\text{-}3,4\text{-}dihydro\text{-}2H\text{-}chromen\text{-}7\text{-}yl\}\text{-}N\text{-}isopropylmethanesulfonamid}$ hydrochloride.